IT systems – success factors and pitfalls

Bengt Sandblad

http://www.it.uu.se/research/hci

IT – success or failure?

- Some IT projects are successful
- Other IT projects are complete or partial failures
- **Why** do some succeed and other fail?
- What do we know about reasons, explanations, recommendations etc?
Assignment 5

The assignment should:
- Summarize what is known about successful IT projects and failures
  - How to define success and failure?
  - What is known about possible explanations?
  - What experiences are reported?
- Describe some cases to exemplify this: Why did a specific project succeed or fail?
- Can we specify some kind of “checklist” of success factors and pitfalls?
  - What could this look like?
- What can be said especially in relation to usability aspects?

Some more general information can be found from the so called “chaos report”

Many sources to these investigations can be found via Internet.
"Chaos" about IT development projects

- 30% of all projects are never finished
- 50% of all projects
  - cost 190% of planned budget
  - for 40% of planned functionality
- 20% are finished within time and budget
  - For large projects: 10%
  - For VERY large projects: 0%

(www.standishgroup.com)
Chaos...SUCCESS/FAILURE PROFILES

The most important aspect of the research is discovering why projects fail. To do this, The Standish Group surveyed IT executive managers for their opinions about why projects succeed. The three major reasons that a project will succeed are user involvement, executive management support, and a clear statement of requirements. There are other success criteria, but with these three elements in place, the chances of success are much greater. Without them, chance of failure increases dramatically.

1. User Involvement 15.9%
2. Executive Management Support 13.9%
3. Clear Statement of Requirements 13.0%
4. Proper Planning 9.6%
5. Realistic Expectations 8.2%
6. Smaller Project Milestones 7.7%
7. Competent Staff 7.2%
8. Ownership 5.3%
9. Clear Vision & Objectives 2.9%
10. Hard-Working, Focused Staff 2.4%
Other 13.9%

Chaos...

The survey participants were also asked about the factors that cause projects to be challenged.

1. Lack of User Input 12.8%
2. Incomplete Requirements & Specifications 12.3%
3. Changing Requirements & Specifications 11.8%
4. Lack of Executive Support 7.5%
5. Technology Incompetence 7.0%
6. Lack of Resources 6.4%
7. Unrealistic Expectations 5.9%
8. Unclear Objectives 5.3%
9. Unrealistic Time Frames 4.3%
10. New Technology 3.7%
Other 23.0%
Chaos...

- Opinions about why projects are impaired and ultimately cancelled ranked incomplete requirements and lack of user involvement at the top of the list.

1. Incomplete Requirements 13.1%
2. Lack of User Involvement 12.4%
3. Lack of Resources 10.6%
4. Unrealistic Expectations 9.9%
5. Lack of Executive Support 9.3%
6. Changing Requirements & Specifications 8.7%
7. Lack of Planning 8.1%
8. Didn't Need It Any Longer 7.5%
9. Lack of IT Management 6.2%
10. Technology Illiteracy 4.3%
Other 9.9%

Success factors

- The “chaos” report and other sources try to evaluate and list important factors related to success of failure. This concern explanations on a “macro scale”.
- What can you find more from literature?
- Are there specific cases/projects where you could analyse success and failure in more detail?
Background material

- You can find a lot via Internet.
- You can focus on the IT project (specification, development, deployment...) as such or more on the usability and user aspects.
- There are books discussing this, e.g. “Usability success stories” by Paul Sherman (Can be borrowed from Bengt)

Assignment 5 report

- Write a short “paper” describing the situation, what is known, what are the explanations, experiences etc?
- What could be improved? How?
- Give advice to people engaged in IT development and deployment how to act in order to promote success and avoid pitfalls.
- Give references!
- Present it orally Wednesday Dec 17.